

**CULPEPER ENGINEERING, P.C.**  
**3251 GERMANNA HIGHWAY**  
**LOCUST GROVE, VIRGINIA 22508**  
**PHONE: 540 423-9706**

December 10, 2015

Anna Westernik  
Department of Environmental Quality  
Northern Region  
13901 Crown Court  
Woodbridge, Virginia 22193

Re: VPDES Permit No. VA0084298, Smith Midland, Fauquier County, VA

Dear Ms. Westernik,

The following responses are provided to your November 9, 2015 comment letter.

Form 1

- Added the additional existing permits/ registrations as detailed.

40486 (Air Registration)  
20023255 (Petroleum)  
VAR00502880 (Waste)  
6061535 (PWSID)

Form 2A

- Added the additional existing permits registrations as detailed.
- Flows were computed from DEQ provided summary. The data is based on the 12 months from September 2014 – August 2015 provided below:

Due	Outfall	Rec'd	Par. Code	Parameter Description	QTY AVG	QTY MAX	Rept. Mo/Yr
10-Oct-14	1	9-Oct-14	1	FLOW	0.001	0.002	Sep-14
10-Nov-14	1	10-Nov-14	1	FLOW	0.0011	0.005	Oct-14
10-Dec-14	1	5-Dec-14	1	FLOW	0.0007	0.001	Nov-14
10-Jan-15	1	6-Jan-15	1	FLOW	0.0008	0.002	Dec-14
10-Feb-15	1	6-Feb-15	1	FLOW	0.0007	0.002	Jan-15
10-Mar-15	1	9-Mar-15	1	FLOW	0.0012	0.004	Feb-15
10-Apr-15	1	8-Apr-15	1	FLOW	0.002	0.005	Mar-15
10-May-15	1	7-May-15	1	FLOW	0.0019	0.007	Apr-15
10-Jun-15	1	5-Jun-15	1	FLOW	0.0012	0.003	May-15
10-Jul-15	1	9-Jul-15	1	FLOW	0.0012	0.003	Jun-15
10-Aug-15	1	10-Aug-15	1	FLOW	0.0012	0.003	Jul-15
10-Sep-15	1	10-Sep-15	1	FLOW	0.0018	0.005	Aug-15
					12 M Avg.	12 M Max	
					0.00123333	0.007	

Max day on 2A entered as 0.007 MGD and average day entered as 0.00123 MGD.

- Temperature data was from logs provided by ESS. The data used is summarized on the next page. The Max Winter temperature, 24.6 C, was from November 5, 2014 and the Max summer temperature, 32.9 C, was from August 19, 2015. Average temp for winter (Nov-April) was 15.4 C and for summer (May-Oct) was 26.9 C.

	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15			
Date	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)	Temp (°C)			
1		24.3		18.6	14.5			16.8	21.3	29.9	27.5				
2	25.2	24.2		14.6	10.8	12.9	13.8	16.8		29.2	27.1				
3	25.9	24.3	18.9	15.7		14.2	13.0	17.7		27.9	26.5	31.2			
4	25.8		24.2	16.0					23.0	27.0		31.4			
5	29.6		24.6	15.5	10.9				24.6			30.9			
6		23.5	21.2		15.9	12.5	8.6	19.8	24.8		28.1	30.5			
7		23.2	20.5		15.2			19.6	24.4		27.0	29.7			
8	24.1	23.1		13.4	14.2			19.6	24.7	23.9	28.1				
9	27.2	22.4		13.9	10.5	7.0	11.7	19.2		26.5	28.4				
10	27.6	22.9	22.1	13.9			12.0	19.4		26.4	28.4				
11	28.0		19.5	12.5		14.7	12.4		27.2	26.7					
12	26.5		22.9	15.0	9.1	14.1	13.1		27.0	27.3		26.5			
13		24.6	22.0		14.3	13.1	13.0	22.4	26.3		28.6	29.5			
14		23.2	21.3		13.6			21.8	25.8		27.4	29.8			
15	27.2	23.3		13.3	13.8			20.5	25.9	27.0	25.2				
16	28.6	15.0		14.8	11.9	14.1	14.9	18.8		29.4	28.7				
17	26.3	24.7	14.3	16.5		13.7	16.4	19.8		29.0	27.9	29.5			
18	25.5			16.0		13.9	15.6		27.9	28.3		31.3			
19	26.9			12.8	9.5	13.2	16.4		28.0	28.7		32.9			
20		24.7	17.7		15.0	13.3	15.8	21.6	27.5		30.3	30.4			
21		25.4	14.0		13.7			19.1	26.2		29.9	29.9			
22	23.5	20.1		11.0	14.9			16.9	25.2	29.9	25.9				
23	27.2	23.5		15.8	11.0	14.7	16.6			29.6	29.7				
24	25.1	23.9	15.3	14.9		12.4	15.9			29.5	29.8	31.0			
25	23.6		16.2	13.4		12.8	15.2		26.9	29.1		29.9			
26	24.1		11.3	9.8	11.9	12.5	16.2		26.8	28.8		29.5			
27		19.4	12.7		12.0	12.6	15.5		27.7		26.5	29.5			
28		23.6	12.5		13.1				28.5		31.3				
29	23.6	20.4		13.1	12.6				28.4	27.1	31.1				
30	24.8	19.1		16.1	10.3		15.9	20.9		27.6	30.7				
31		21.8		14.9			16.0				30.0	28.0			
Min	23.50	15.00	11.30	9.80	9.10	7.00	8.60	16.80	21.30	23.90	25.20	26.50			
Max			24.6	18.6	15.9	14.7	16.6	22.4					Winter	Max	24.6
Max	29.60	25.4							28.5	29.9	31.3	32.9	Summer	Max	32.90
Ave			18.4	14.4	12.7	13.0	14.4	19.5					Winter	Ave	15.4
Ave	26.0	22.6							26.1	28.0	28.4	30.1	Summer	Ave	26.9

- The minimum daily pH in the DEQ summary was recorded as 6.1 in Sept, 2015. Based on this data point the ESS log was reviewed. The value in the log indicated 6.11 which was used in the application. The max daily pH was 8.5 which was in the log as 8.45 which was used in the application.

Due	Outfall	Rec'd	Par. Code	Parameter Descrip.	CONC MIN	Lim Min	CONC MAX	Lim Max	Rept. Mo/Yr
10-Oct-14	1	9-Oct-14	2	pH	6.4	6	7.8	9	Sep-14
10-Nov-14	1	10-Nov-14	2	pH	7.2	6	8	9	Oct-14
10-Dec-14	1	5-Dec-14	2	pH	7	6	8.3	9	Nov-14
10-Jan-15	1	6-Jan-15	2	pH	7.3	6	8.2	9	Dec-14
10-Feb-15	1	6-Feb-15	2	pH	6.9	6	8.5	9	Jan-15
10-Mar-15	1	9-Mar-15	2	pH	7.3	6	8.1	9	Feb-15
10-Apr-15	1	8-Apr-15	2	pH	7	6	8	9	Mar-15
10-May-15	1	7-May-15	2	pH	6.9	6	7.9	9	Apr-15
10-Jun-15	1	5-Jun-15	2	pH	6.6	6	7.6	9	May-15
10-Jul-15	1	9-Jul-15	2	pH	6.7	6	7.6	9	Jun-15
10-Aug-15	1	10-Aug-15	2	pH	7	6	7.8	9	Jul-15
10-Sep-15	1	10-Sep-15	2	pH	6.1	6	7.8	9	Aug-15

Min: 6.1 Max: 8.5  
 ESS Log 8-27-15  
 ESS Log 1-28-15  
 6.11 8.45

- Mailing page 9

#### Form 2C and Addendum for Outfall 002

- The design flow of 0.004 was used as this is the volume of a batch discharged per submitted reports. The batch volume was used as the design flow. The 5' depth (for discharge) volume of the tank is 0.004. Tank interior L X W is 9' X 12'. This is the basis of the design volume (and current batch Q).
- Mailing page 4
- Added the water supply constituents noted in your review as "Believed Present" you listed:
  - In Part V.B, fluoride, sulfate, barium, iron, manganese, zinc, nickel, and nitrate-nitrite should be indicated as believed present because these constituents are found in the source water. Chlorine should be indicated as believed present because it is used in the process.

Changed chlorine to "Believed Present" as requested



## SMITH MIDLAND WELL DATA

## Wel DEV

Year:	DCLS 2002	DCLS 2005	DCLS 2008	DCLS 2011	ESS 2014
Barium	<0.20	<0.2	<0.2	0.095	0.052
Iron	<0.2	<0.2	0.293	<0.05	<0.05
Manganese	0.01	0.013	0.15	<0.01	<0.05
Zinc	<0.20	0.21	<0.20	<0.01	<0.05
Nickel	<0.01	<0.01	<0.01	<0.01	0.005
Fluoride	<0.20	<0.20	<0.20	0.63	0.12
Sulfate	357	1059	541	29.9	1190

## SMITH MIDLAND WELL DATA

## Nitrate/Nitrite

Year:	Lab:	Result:
2002	DCLS	2.98
2004	DCLS	0.88
2005	DCLS	2.57
2006	DCLS	2.77
2007	DCLS	0.73
2008	DCLS	1.2
2009	DCLS	0.34
2010	DCLS	0.62
2011	DCLS	0.48
2012	DCLS	0.44
2013	DCLS	0.45
2014	DCLS	1.84
2015	Analytics	3.52

On Form 2C Part V.B. chlorine results available from monitoring/reporting noted as <QL; the data available do not indicate it is present in the discharge however as it may be used in processing it was checked as believed present.

I also mailed the Form 1 signature page as the existing permits were revised.

Thank you,



Rebecca S. Tolliver

cc: Wes Taylor & Andy East

FORM <b>1</b> GENERAL	 <b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> <b>GENERAL INFORMATION</b> <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">I. EPA I.D. NUMBER</th> </tr> <tr> <td style="width:5%;">S</td> <td style="width:75%;">VA0084298</td> <td style="width:10%;">T/A</td> <td style="width:10%;">C</td> </tr> <tr> <td>F</td> <td></td> <td></td> <td>D</td> </tr> <tr> <td>1</td> <td>2</td> <td>13</td> <td>14 15</td> </tr> </table>	I. EPA I.D. NUMBER				S	VA0084298	T/A	C	F			D	1	2	13	14 15																																						
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<p><b>II. POLLUTANT CHARACTERISTICS</b></p> <p>INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of <b>bold-faced terms</b>.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">SPECIFIC QUESTIONS</th> <th colspan="3">Mark "X"</th> <th rowspan="2">SPECIFIC QUESTIONS</th> <th colspan="3">Mark "X"</th> </tr> <tr> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> </tr> </thead> <tbody> <tr> <td>A. Is this facility a <b>publicly owned treatment works</b> which results in a <b>discharge to waters of the U.S.</b>? (FORM 2A)</td> <td></td> <td style="text-align: center;">X</td> <td></td> <td>B. Does or will this facility (either existing or proposed) include a <b>concentrated animal feeding operation</b> or <b>aquatic animal production facility</b> which results in a <b>discharge to waters of the U.S.</b>? (FORM 2B)</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>C. Is this a facility which currently results in <b>discharges to waters of the U.S.</b> other than those described in A or B above? (FORM 2C)</td> <td style="text-align: center;">X</td> <td></td> <td></td> <td>D. Is this a proposed facility (other than those described in A or B above) which will result in a <b>discharge to waters of the U.S.</b>? (FORM 2D)</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>E. Does or will this facility treat, store, or dispose of <b>hazardous wastes</b>? (FORM 3)</td> <td></td> <td style="text-align: center;">X</td> <td></td> <td>F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)</td> <td></td> <td style="text-align: center;">X</td> <td></td> <td>H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>I. Is this facility a proposed <b>stationary source</b> which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? 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15	16	45	46	51																																																				
<p><b>VI. FACILITY LOCATION</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER</th> <th colspan="2">B. COUNTY NAME</th> <th>C. CITY OR TOWN</th> <th>D. STATE</th> <th>E. ZIP CODE</th> <th>F. COUNTY CODE (if known)</th> </tr> <tr> <td style="width:5%;">C</td> <td style="width:5%;">5</td> <td style="width:40%;">5119 Catlett Road</td> <td style="width:20%;">Fauquier</td> <td style="width:10%;">Midland</td> <td style="width:10%;">VA</td> <td style="width:10%;">22728</td> <td></td> </tr> <tr> <td>15</td> <td>16</td> <td>45</td> <td>46</td> <td>47</td> <td>51</td> <td>52</td> <td>54</td> </tr> </table>			A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER		B. COUNTY NAME		C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)	C	5	5119 Catlett Road	Fauquier	Midland	VA	22728		15	16	45	46	47	51	52	54																														
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER		B. COUNTY NAME		C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)																																																	
C	5	5119 Catlett Road	Fauquier	Midland	VA	22728																																																		
15	16	45	46	47	51	52	54																																																	

CONTINUED FROM THE FRONT

## VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND									
C	7	3	2	7	(specify) Concrete Products					C	7				(specify)				
15	16	17	18	19						15	16	17	18	19					
C. THIRD										D. FOURTH									
C	7				(specify)					C	7				(specify)				
15	16	17	18	19						15	16	17	18	19					

## VIII. OPERATOR INFORMATION

A. NAME										B. Is the name listed in Item VIII-A also the owner?														
C	8	Environmental Systems Service, LTD										C		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO										
15	16											15	16											
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)										D. PHONE (area code & no.)														
F = FEDERAL					M = PUBLIC (other than federal or state)					P = PRIVATE					O = OTHER (specify)					A (540) 825-6660				

E. STREET OR P.O. BOX										
218 N. Main Street										
25										55

F. CITY OR TOWN										G. STATE		H. ZIP CODE		IX. INDIAN LAND																					
C	B	Culpeper								VA		22701		Is the facility located on Indian lands?																					
15	16													<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																					
15	16									40		41		42		43		44		45		46		47		48		49		50		51		52	

## X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)									
C	9	N	VA0084298							C	9	P	40486						
15	16	17	18	19	20	21	22	23	24	15	16	17	18	19	20	21	22	23	24
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)									
C	9	U								C	9		VAG110298						
15	16	17	18	19	20	21	22	23	24	15	16	17	18	19	20	21	22	23	24
										Storm Water - General Concrete Products									
C. RCRA (Hazardous Wastes)										E. OTHER (specify)									
C	9	R	VAR000502880							C	9		6061535						
15	16	17	18	19	20	21	22	23	24	15	16	17	18	19	20	21	22	23	24
										(specify) PRSTD									

## XI. MAP


Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

## XII. NATURE OF BUSINESS (provide a brief description)

Smith Midland is a manufacturer of precast concrete products.

## XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)										B. SIGNATURE										C. DATE SIGNED									
Wes Taylor, Vice President																				12-10-15									

## COMMENTS FOR OFFICIAL USE ONLY

C										
15	16									55

FORM  
**2A**  
NPDES**NPDES FORM 2A APPLICATION OVERVIEW****APPLICATION OVERVIEW**

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

**BASIC APPLICATION INFORMATION:**

- A. Basic Application Information for all Applicants.** All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow  $\geq$  0.1 mgd.** All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification.** All applicants must complete Part C (Certification).

**SUPPLEMENTAL APPLICATION INFORMATION:**

- D. Expanded Effluent Testing Data.** A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data.** A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
  - 1. Has a design flow rate greater than or equal to 1 mgd,
  - 2. Is required to have a pretreatment program (or has one in place), or
  - 3. Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes.** A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
  - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
  - 2. Any other industrial user that:
    - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
    - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
    - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems.** A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

**ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)**

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

## PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

## A.1. Facility Information.

Facility name Smith Midland CorporationMailing Address P.O. Box 300  
Midland, VA 22728Contact person Wes TaylorTitle Vice PresidentTelephone number (540) 439-3266Facility Address 5119 Catlett Road  
(not P.O. Box) Midland, VA 22728

## A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Same

Mailing Address \_\_\_\_\_

Contact person \_\_\_\_\_

Title \_\_\_\_\_

Telephone number \_\_\_\_\_

Is the applicant the owner or operator (or both) of the treatment works?



owner

☐ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.



facility

☐ applicant

## A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0084298 & VAG110298(Storm Water)

PSD \_\_\_\_\_

UIC \_\_\_\_\_

Other Public Water - PWSID 6061535RCRA VAR000502880Other 40486 (Air Regis.) 20023255 (Petroleum)

## A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name

Population Served

Type of Collection System

Ownership

Smith Midland Corporation~120-150SeparatePrivate

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total population served ~120-150

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## A.5. Indian Country.

- a. Is the treatment works located in Indian Country?

☐ Yes ☒ No

- b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

☐ Yes ☒ No

## A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

- a. Design flow rate
- 0.0015
- mgd

	Two Years Ago	Last Year	This Year
b. Annual average daily flow rate	<u>0.0011</u>	<u>0.0012</u>	<u>0.0012</u> mgd
c. Maximum daily flow rate	<u>0.0043</u>	<u>0.004</u>	<u>0.0066</u> mgd

## A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

☒ Separate sanitary sewer 100 %  
☐ Combined storm and sanitary sewer \_\_\_\_\_ %

## A.8. Discharges and Other Disposal Methods.

- a. Does the treatment works discharge effluent to waters of the U.S.?
- ☒
- Yes
- ☐
- No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1  
ii. Discharges of untreated or partially treated effluent 0  
iii. Combined sewer overflow points 0  
iv. Constructed emergency overflows (prior to the headworks) 0  
v. Other See Form 2C for Indust. Disch. (002) 1

- b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.?
- ☐
- Yes
- ☒
- No

If yes, provide the following for each surface impoundment:

Location: \_\_\_\_\_

Annual average daily volume discharged to surface impoundment(s) \_\_\_\_\_ mgd

Is discharge \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- c. Does the treatment works land-apply treated wastewater?
- ☐
- Yes
- ☒
- No

If yes, provide the following for each land application site:

Location: \_\_\_\_\_

Number of acres: \_\_\_\_\_

Annual average daily volume applied to site: \_\_\_\_\_ Mgd

Is land application \_\_\_\_\_ continuous or \_\_\_\_\_ intermittent?

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?
- ☐
- Yes
- ☒
- No

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

For each treatment works that receives this discharge, provide the following:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
\_\_\_\_\_

Contact person: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone number: \_\_\_\_\_

If known, provide the NPDES permit number of the treatment works that receives this discharge. \_\_\_\_\_

Provide the average daily flow rate from the treatment works into the receiving facility. \_\_\_\_\_

mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)?

\_\_\_\_\_ Yes



No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: \_\_\_\_\_

Is disposal through this method \_\_\_\_\_

continuous or

\_\_\_\_\_ intermittent?

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

## A.9. Description of Outfall.

- a. Outfall number 001
- b. Location 22728  
(City or town, if applicable) (Zip Code)  
Fauquier County VA  
(County) (State)  
38 36 29 77 42 47  
(Latitude) (Longitude)
- c. Distance from shore (if applicable) NA ft.
- d. Depth below surface (if applicable) NA ft.
- e. Average daily flow rate 0.0012 mgd
- f. Does this outfall have either an intermittent or a periodic discharge? ☒ Yes ☐ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: Daily when staffed
- Average duration of each discharge: Per EQ pumping/dosed(multiple/d)
- Average flow per discharge: 0.0012(flow is dosed) mgd
- Months in which discharge occurs: Jan to Dec
- g. Is outfall equipped with a diffuser? ☐ Yes ☒ No

## A.10. Description of Receiving Waters.

- a. Name of receiving water Licking Run
- b. Name of watershed (if known) Upper Cedar Run/ Licking Run
- United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_
- c. Name of State Management/River Basin (if known): Potomac & Shenandoah River Basin
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): 0207007
- d. Critical low flow of receiving stream (if applicable): 0.0046 mgd  
acute 0.0023 mgd/ 0.0036 cfs chronic 0.0071 cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): NA mg/l of CaCO<sub>3</sub>



FACILITY NAME AND PERMIT NUMBER:  
Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

**A.11. Description of Treatment.**

a. What levels of treatment are provided? Check all that apply.

☐ Primary

☒ Secondary

☐ Advanced

☐ Other. Describe: \_\_\_\_\_

b. Indicate the following removal rates (as applicable):

Design BOD<sub>5</sub> removal or Design CBOD<sub>5</sub> removal 90 %

Design SS removal 90 %

Design P removal NA %

Design N removal NA %

Other \_\_\_\_\_ %

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Chlorination

If disinfection is by chlorination, is dechlorination used for this outfall?

☒

Yes

☐ No

d. Does the treatment plant have post aeration?

☒

Yes

☐ No

**A.12. Effluent Testing Information.** All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.11	s.u.			
pH (Maximum)	8.45	s.u.			
Flow Rate	0.007	mgd	0.00123	mgd	12 M
Temperature (Winter)	24.6	Degrees C	15.4	Degrees C	6 M (Nov-Apr)
Temperature (Summer)	32.9	Degrees C	26.9	Degrees C	6 M (May-Oct)

\* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

**CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.**

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	56	mg/l	7.42	mg/l	16 (12M)	SM5210 B-01	2 mg/l
	CBOD-5							
FECAL COLIFORM		109	#/cml	1	geom	22 (12M)	Collilert MPN	1 MPN/100 ML
TOTAL SUSPENDED SOLIDS (TSS)		103	mg/l	16.92	mg/l	30 (12M)	SM2540 D-97	1.0 mg/l

**END OF PART A.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## BASIC APPLICATION INFORMATION

NA

**PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate  $\geq 0.1$  mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

\_\_\_\_\_ gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

**B.2. Topographic Map.** Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

**B.3. Process Flow Diagram or Schematic.** Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

**B.4. Operation/Maintenance Performed by Contractor(s).**

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? \_\_\_\_ Yes \_\_\_\_ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Responsibilities of Contractor: \_\_\_\_\_

**B.5. Scheduled Improvements and Schedules of Implementation.** Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

- b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

\_\_\_\_ Yes \_\_\_\_ No

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: \_\_\_\_\_  
\_\_\_\_\_

**B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).**

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: \_\_\_\_\_

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)							
CHLORINE (TOTAL RESIDUAL, TRC)							
DISSOLVED OXYGEN							
TOTAL KJELDAHL NITROGEN (TKN)							
NITRATE PLUS NITRITE NITROGEN							
OIL and GREASE							
PHOSPHORUS (Total)							
TOTAL DISSOLVED SOLIDS (TDS)							
OTHER							

**END OF PART B.**

**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

☒ Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Wes Taylor, Vice PresidentSignature Telephone number (540) 439-3266Date signed 12/16/15

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

**SEND COMPLETED FORMS TO:**

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

NA

## PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

**Effluent Testing: 1.0 mgd and Pretreatment Treatment Works.** If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY											
ARSENIC											
BERYLLIUM											
CADMIUM											
CHROMIUM											
COPPER											
LEAD											
MERCURY											
NICKEL											
SELENIUM											
SILVER											
THALLIUM											
ZINC											
CYANIDE											
TOTAL PHENOLIC COMPOUNDS											
HARDNESS (AS CaCO <sub>3</sub> )											
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

**FACILITY NAME AND PERMIT NUMBER:**  
 Smith Midland Corporation VA0084298

Form Approved 1/14/99  
 OMB Number 2040-0086

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN											
ACRYLONITRILE											
BENZENE											
BROMOFORM											
CARBON TETRACHLORIDE											
CLOROBENZENE											
CHLORODIBROMO-METHANE											
CHLOROETHANE											
2-CHLORO-ETHYL VINYL ETHER											
CHLOROFORM											
DICHLOROBROMO-METHANE											
1,1-DICHLOROETHANE											
1,2-DICHLOROETHANE											
TRANS-1,2-DICHLORO-ETHYLENE											
1,1-DICHLOROETHYLENE											
1,2-DICHLOROPROPANE											
1,3-DICHLORO-PROPYLENE											
ETHYLBENZENE											
METHYL BROMIDE											
METHYL CHLORIDE											
METHYLENE CHLORIDE											
1,1,2,2-TETRACHLORO-ETHANE											
TETRACHLORO-ETHYLENE											
TOLUENE											

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

 Form Approved 1/14/99  
 OMB Number 2040-0086

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE											
1,1,2-TRICHLOROETHANE											
TRICHLOROETHYLENE											
VINYL CHLORIDE											

Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

**ACID-EXTRACTABLE COMPOUNDS**

P-CHLORO-M-CRESOL											
2-CHLOROPHENOL											
2,4-DICHLOROPHENOL											
2,4-DIMETHYLPHENOL											
4,6-DINITRO-O-CRESOL											
2,4-DINITROPHENOL											
2-NITROPHENOL											
4-NITROPHENOL											
PENTACHLOROPHENOL											
PHENOL											
2,4,6-TRICHLOROPHENOL											

Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.

--	--	--	--	--	--	--	--	--	--	--	--

**BASE-NEUTRAL COMPOUNDS.**

ACENAPHTHENE											
ACENAPHTHYLENE											
ANTHRACENE											
BENZIDINE											
BENZO(A)ANTHRACENE											
BENZO(A)PYRENE											

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

 Form Approved 1/14/99  
 OMB Number 2040-0086

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE											
BENZO(GHI)PERYLENE											
BENZO(K)FLUORANTHENE											
BIS (2-CHLOROETHOXY) METHANE											
BIS (2-CHLOROETHYL)-ETHER											
BIS (2-CHLOROISO-PROPYL) ETHER											
BIS (2-ETHYLHEXYL) PHTHALATE											
4-BROMOPHENYL PHENYL ETHER											
BUTYL BENZYL PHTHALATE											
2-CHLORONAPHTHALENE											
4-CHLORPHENYL PHENYL ETHER											
CHRYSENE											
DI-N-BUTYL PHTHALATE											
DI-N-OCTYL PHTHALATE											
DIBENZO(A,H) ANTHRACENE											
1,2-DICHLORO BENZENE											
1,3-DICHLORO BENZENE											
1,4-DICHLORO BENZENE											
3,3-DICHLORO BENZIDINE											
DIETHYL PHTHALATE											
DIMETHYL PHTHALATE											
2,4-DINITROTOLUENE											
2,6-DINITROTOLUENE											
1,2-DIPHENYLHYDRAZINE											



## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

Outfall number: \_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE											
FLUORENE											
HEXACHLOROBENZENE											
HEXACHLOROBUTADIENE											
HEXACHLOROCYCLO-PENTADIENE											
HEXACHLOROETHANE											
INDENO(1,2,3-CD)PYRENE											
ISOPHORONE											
NAPHTHALENE											
NITROBENZENE											
N-NITROSODI-N-PROPYLAMINE											
N-NITROSODI- METHYLAMINE											
N-NITROSODI-PHENYLAMINE											
PHENANTHRENE											
PYRENE											
1,2,4-TRICHLOROBENZENE											

Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.

Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.

END OF PART D.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

## SUPPLEMENTAL APPLICATION INFORMATION

NA

## PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

## E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

\_\_\_\_ chronic      \_\_\_\_ acute

**E.2. Individual Test Data.** Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

Test number: \_\_\_\_\_ Test number: \_\_\_\_\_ Test number: \_\_\_\_\_

## a. Test information.

Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			

## b. Give toxicity test methods followed.

Manual title			
Edition number and year of publication			
Page number(s)			

## c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.

24-Hour composite			
Grab			

## d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)

Before disinfection			
After disinfection			
After dechlorination			

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

 Form Approved 1/14/99  
 OMB Number 2040-0086

Test number: \_\_\_\_\_

Test number: \_\_\_\_\_

Test number: \_\_\_\_\_

e. Describe the point in the treatment process at which the sample was collected.

Sample was collected:

f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.

Chronic toxicity

Acute toxicity

g. Provide the type of test performed.

Static

Static-renewal

Flow-through

h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.

Laboratory water

Receiving water

i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.

Fresh water

Salt water

j. Give the percentage effluent used for all concentrations in the test series.


k. Parameters measured during the test. (State whether parameter meets test method specifications)

pH

Salinity

Temperature

Ammonia

Dissolved oxygen

l. Test Results.

Acute:

Percent survival in 100% effluent	%	%	%
LC <sub>50</sub>			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

## FACILITY NAME AND PERMIT NUMBER:

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

Chronic:

NOEC	%	%	%
IC <sub>25</sub>	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

**E.3. Toxicity Reduction Evaluation.** Is the treatment works involved in a Toxicity Reduction Evaluation?

\_\_\_\_ Yes \_\_\_\_ No

If yes, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**E.4. Summary of Submitted Biomonitoring Test Information.** If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: \_\_\_\_\_ (MM/DD/YYYY)

Summary of results: (see instructions)  
\_\_\_\_\_  
\_\_\_\_\_**END OF PART E.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**

FACILITY NAME AND PERMIT NUMBER:  
Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

**SUPPLEMENTAL APPLICATION INFORMATION**

NA

**PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES**

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

**GENERAL INFORMATION:**

**F.1. Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

\_\_\_\_ Yes \_\_\_\_ No

**F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs).** Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. \_\_\_\_\_

b. Number of CIUs. \_\_\_\_\_

**SIGNIFICANT INDUSTRIAL USER INFORMATION:**

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

**F.3. Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

**F.4. Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

\_\_\_\_\_

**F.5. Principal Product(s) and Raw Material(s).** Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): \_\_\_\_\_

Raw material(s): \_\_\_\_\_

**F.6. Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_\_ continuous or \_\_\_\_ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

\_\_\_\_\_ gpd (\_\_\_\_ continuous or \_\_\_\_ intermittent)

**F.7. Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits \_\_\_\_ Yes \_\_\_\_ No

b. Categorical pretreatment standards \_\_\_\_ Yes \_\_\_\_ No

If subject to categorical pretreatment standards, which category and subcategory?

\_\_\_\_\_

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

**F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU.** Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

☐ Yes ☐ No

If yes, describe each episode.

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**RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:**

**F.9. RCRA Waste.** Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ☐ Yes ☐ No (go to F.12.)

**F.10. Waste Transport.** Method by which RCRA waste is received (check all that apply):

☐ Truck☐ Rail☐ Dedicated Pipe

**F.11. Waste Description.** Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste NumberAmountUnits

<u>EPA Hazardous Waste Number</u>	<u>Amount</u>	<u>Units</u>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

**CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:**

**F.12. Remediation Waste.** Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

☐ Yes (complete F.13 through F.15.)☐ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

**F.13. Waste Origin.** Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

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**F.14. Pollutants.** List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

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**F.15. Waste Treatment.**

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

☐ Yes ☐ No

If yes, describe the treatment (provide information about the removal efficiency):

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b. Is the discharge (or will the discharge be) continuous or intermittent?

☐ Continuous☐ Intermittent

If intermittent, describe discharge schedule.

---

**END OF PART F.**  
**REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE**

FACILITY NAME AND PERMIT NUMBER:  
Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

**SUPPLEMENTAL APPLICATION INFORMATION** **NA**

**PART G. COMBINED SEWER SYSTEMS**

If the treatment works has a combined sewer system, complete Part G.

**G.1. System Map.** Provide a map indicating the following: (may be included with Basic Application Information)

- All CSO discharge points.
- Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
- Waters that support threatened and endangered species potentially affected by CSOs.

**G.2. System Diagram.** Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

- Locations of major sewer trunk lines, both combined and separate sanitary.
- Locations of points where separate sanitary sewers feed into the combined sewer system.
- Locations of in-line and off-line storage structures.
- Locations of flow-regulating devices.
- Locations of pump stations.

**CSO OUTFALLS:**

Complete questions G.3 through G.6 once for each CSO discharge point.

**G.3. Description of Outfall.**

- Outfall number \_\_\_\_\_
- Location  
(City or town, if applicable) \_\_\_\_\_ (Zip Code) \_\_\_\_\_  
(County) \_\_\_\_\_ (State) \_\_\_\_\_  
(Latitude) \_\_\_\_\_ (Longitude) \_\_\_\_\_
- Distance from shore (if applicable) \_\_\_\_\_ ft.
- Depth below surface (if applicable) \_\_\_\_\_ ft.
- Which of the following were monitored during the last year for this CSO?  
\_\_\_\_ Rainfall      \_\_\_\_ CSO pollutant concentrations      \_\_\_\_ CSO frequency  
\_\_\_\_ CSO flow volume      \_\_\_\_ Receiving water quality
- How many storm events were monitored during the last year? \_\_\_\_\_

**G.4. CSO Events.**

- Give the number of CSO events in the last year.  
\_\_\_\_\_ events (\_\_\_\_ actual or \_\_\_\_ approx.)
- Give the average duration per CSO event.  
\_\_\_\_\_ hours (\_\_\_\_ actual or \_\_\_\_ approx.)

**FACILITY NAME AND PERMIT NUMBER:**

Smith Midland Corporation VA0084298

Form Approved 1/14/99  
OMB Number 2040-0086

- c. Give the average volume per CSO event.

\_\_\_\_\_ million gallons (\_\_\_\_\_ actual or \_\_\_\_\_ approx.)

- d. Give the minimum rainfall that caused a CSO event in the last year.

\_\_\_\_\_ inches of rainfall

**G.5. Description of Receiving Waters.**

- a. Name of receiving water: \_\_\_\_\_

- b. Name of watershed/river/stream system: \_\_\_\_\_

United States Soil Conservation Service 14-digit watershed code (if known): \_\_\_\_\_

- c. Name of State Management/River Basin: \_\_\_\_\_

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): \_\_\_\_\_

**G.6. CSO Operations.**

Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

\_\_\_\_\_  
\_\_\_\_\_**END OF PART G.****REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.**



Additional information, if provided, will appear on the following pages.



CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal? <input checked="" type="checkbox"/> YES (complete the following table) <input type="checkbox"/> NO (go to Section III)								
1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		C. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
002	Concrete Prod. Finishing Pad	2	12	0.004	0.004	0.003	0.004	3D/M
Discharge is a batch operation. Volume per batch changed to 0.004 mgd in Sept., 2014. Prior batch was 0.002 mgd.								
<b>III. PRODUCTION</b>								
A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility? <input type="checkbox"/> YES (complete Item III-B) <input checked="" type="checkbox"/> NO (go to Section IV)								
B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)? <input type="checkbox"/> YES (complete Item III-C) <input checked="" type="checkbox"/> NO (go to Section IV)								
C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.								
1. AVERAGE DAILY PRODUCTION						2. AFFECTED OUTFALLS (list outfall numbers)		
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)						
<b>IV. IMPROVEMENTS</b>								
A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions. <input type="checkbox"/> YES (complete the following table) <input checked="" type="checkbox"/> NO (go to Item IV-B)								
1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE				
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED			
B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.								
<input checked="" type="checkbox"/> MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED								

See Last Page for reuse request

## V. INTAKE AND EFFLUENT CHARACTERISTICS

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

☒ NO (go to Item VI-B)

This image shows a completely blank white rectangular area enclosed within a thin black border. There are no markings, text, or illustrations present on the page.

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**VII. BIOLOGICAL TOXICITY TESTING DATA**

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (identify the test(s) and describe their purposes below)

☒ NO (go to Section VIII)

**VIII. CONTRACT ANALYSIS INFORMATION**

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Environmental Systems Service, LTD	218 N. Main St., Culpeper, VA 22701	825-6660	BOD, COD, TOC, TSS, Ammonia-N, TPH
DCLS	Richmond, NA		Well Water supply data Well Water supply data

**IX. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)	B. PHONE NO. (area code & no.)
Wes Taylor, Vice President	(540) 439-3266
C. SIGNATURE	D. DATE SIGNED
	12-10-15

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages.  
SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)  
VA0084298

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.  
002

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)			4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS
a. Biochemical Oxygen Demand (BOD)	60	0.91	60	0.91		1	mg/l	KG/D	NA	NA
b. Chemical Oxygen Demand (COD)	564	8.54	564	8.54	256	10	mg/l	KG/D	NA	NA
c. Total Organic Carbon (TOC)	37.3	0.56	37.3	0.56		1	mg/l	KG/D	NA	NA
d. Total Suspended Solids (TSS)	511	7.74	138.8	2.10	24.5	47	mg/l	KG/D	NA	NA
e. Ammonia (as N)	<0.10	<0.10	<0.10	<0.10		1	mg/l	KG/D	NA	NA
f. Flow	VALUE 0.004		VALUE 0.004		VALUE 0.004	89 (DD)	MGD		VALUE NA	NA
g. Temperature (winter)	VALUE 14.8		VALUE 14.8		VALUE 8.1	5	°C		VALUE NA	NA
h. Temperature (summer)	VALUE 35		VALUE 25.9		VALUE 22.2	14	°C		VALUE NA	NA
i. pH	MINIMUM 6.2	MAXIMUM 8.9	MINIMUM 6.2	MAXIMUM 8.9		89	STANDARD UNITS			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual	X			<QL		<QL			<QL			mg / l		
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X												X Well	
f. Nitrate-Nitrite (as N)	X												X Well	

## ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X										
h. Oil and Grease	X		1.74	0.026	1.74	0.026	9	mg/l	KG/D			
i. Phosphorus (as P), Total (7723-14-0)		X										
j. Radioactivity												
(1) Alpha, Total		X										
(2) Beta, Total		X										
(3) Radium, Total		X										
(4) Radium 226, Total		X										
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X									X Well		
l. Sulfide (as S)		X										
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)		X										
n. Surfactants		X										
o. Aluminum, Total (7429-90-5)		X										
p. Barium, Total (7440-39-3)	X									X Well		
q. Boron, Total (7440-42-8)		X										
r. Cobalt, Total (7440-48-4)		X										
s. Iron, Total (7439-89-6)	X									X Well		
t. Magnesium, Total (7439-95-4)		X										
u. Molybdenum, Total (7439-98-7)		X										
v. Manganese, Total (7439-96-5)	X									X Well		
w. Tin, Total (7440-31-5)		X										
x. Titanium, Total (7440-32-6)		X										

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
VA0084298	002

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1)	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	5. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
					(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS													
1M. Antimony, Total (7440-36-0)			X										
2M. Arsenic, Total (7440-38-2)			X										
3M. Beryllium, Total (7440-41-7)			X										
4M. Cadmium, Total (7440-43-9)			X										
5M. Chromium, Total (7440-47-3)			X										
6M. Copper, Total (7440-50-8)			X										
7M. Lead, Total (7439-92-1)			X										
8M. Mercury, Total (7439-97-6)			X										
9M. Nickel, Total (7440-02-0)		X									X Well		
10M. Selenium, Total (7782-49-2)			X										
11M. Silver, Total (7440-22-4)			X										
12M. Thallium, Total (7440-28-0)			X										
13M. Zinc, Total (7440-66-6)		X									X Well		
14M. Cyanide, Total (57-12-5)			X										
15M. Phenols, Total			X										
DIOXIN													
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X										

DESCRIBE RESULTS



CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)						
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	5. INTAKE (optional)				
					(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	a. LONG TERM AVERAGE VALUE (1)	b. NO. OF ANALYSES	
GC/MS FRACTION - VOLATILE COMPOUNDS																
1V. Acrolein (107-02-8)			X													
2V. Acrylonitrile (107-13-1)			X													
3V. Benzene (71-43-2)			X													
4V. Bis (Chloromethyl) Ether (542-88-1)				DELISTED 02-4-1981 ANALYSIS NOT REQUIRED FOR THIS PARAMETER												
5V. Bromoform (75-25-2)			X													
6V. Carbon Tetrachloride (56-23-5)			X													
7V. Chlorobenzene (108-90-7)			X													
8V. Chlorodibromomethane (124-48-1)			X													
9V. Chloroethane (75-00-3)			X													
10V. 2-Chloroethylvinyl Ether (110-75-8)			X													
11V. Chloroform (67-66-3)			X													
12V. Dichlorobromomethane (75-27-4)			X													
13V. Dichlorodifluoromethane (75-71-8)				DELISTED 01-8-1981 ANALYSIS NOT REQUIRED FOR THIS PARAMETER												
14V. 1,1-Dichloroethane (75-34-3)			X													
15V. 1,2-Dichloroethane (107-06-2)			X													
16V. 1,1-Dichloroethylene (75-35-4)			X													
17V. 1,2-Dichloropropane (78-87-5)			X													
18V. 1,3-Dichloropropylene (542-75-6)			X													
19V. Ethylbenzene (100-41-4)			X													
20V. Methyl Bromide (74-83-9)			X													
21V. Methyl Chloride (74-87-3)			X													

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)												
22V. Methylene Chloride (75-09-2)			X									
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X									
24V. Tetrachloroethylene (127-18-4)			X									
25V. Toluene (108-88-3)			X									
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X									
27V. 1,1,1-Trichloroethane (71-55-6)			X									
28V. 1,1,2-Trichloroethane (79-00-5)			X									
29V. Trichloroethylene (79-01-6)			X									
30V. Trichlorofluoromethane (75-69-4)												
31V. Vinyl Chloride (75-01-4)			X									
GC/MS FRACTION - ACID COMPOUNDS												
1A. 2-Chlorophenol (95-57-8)			X									
2A. 2,4-Dichlorophenol (120-83-2)			X									
3A. 2,4-Dimethylphenol (105-67-9)			X									
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X									
5A. 2,4-Dinitrophenol (51-28-5)			X									
6A. 2-Nitrophenol (88-75-5)			X									
7A. 4-Nitrophenol (100-02-7)			X									
8A. P-Chloro-M-Cresol (69-50-7)			X									
9A. Pentachlorophenol (87-86-5)			X									
10A. Phenol (108-95-2)			X									
11A. 2,4,6-Trichlorophenol (88-05-2)			X									

DELISTED 01-8-1981 ANALYSIS NOT REQUIRED FOR THIS PARAMETER

EPA Form 3510-2C (8-90)

PAGE V-5

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)		2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)							
a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1)	CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available)	(1)	CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available)	(1)	CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	a. LONG TERM AVERAGE VALUE (1)	CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS																		
1B. Acenaphthene (83-32-9)																		
2B. Acenaphthylene (208-96-8)																		
3B. Anthracene (120-12-7)																		
4B. Benzidine (92-87-5)																		
5B. Benzo (a) Anthracene (56-55-3)																		
6B. Benzo (a) Pyrene (50-32-8)																		
7B. 3,4-Benzofluoranthene (205-99-2)																		
8B. Benzo (ghi) Perylene (191-24-2)																		
9B. Benzo (k) Fluoranthene (207-08-9)																		
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)																		
11B. Bis (2-Chloro-ethoxy) Ether (111-44-4)																		
12B. Bis (2-Chloroisopropoxy) Ether (102-80-1)																		
13B. Bis (2-Ethylhexoxy) Phthalate (117-81-7)																		
14B. 4-Bromophenyl Phenyl Ether (101-55-3)																		
15B. Butyl Benzyl Phthalate (85-68-7)																		
16B. 2-Chloronaphthalene (91-58-7)																		
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)																		
18B. Chrysene (218-01-9)																		
19B. Dibenz (a,h) Anthracene (53-70-3)																		
20B. 1,2-Dichlorobenzene (95-50-1)																		
21B. 1,3-Di-chlorobenzene (541-73-1)																		

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS		b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION (2) MASS		c. LONG TERM AVG. VALUE (if available) (1) CONCENTRATION (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)														
22B. 1,4-Dichlorobenzene (106-46-7)			X											
23B. 3,3-Dichlorobenzidine (91-94-1)			X											
24B. Diethyl Phthalate (84-66-2)			X											
25B. Dimethyl Phthalate (131-11-3)			X											
26B. Di-N-Butyl Phthalate (84-74-2)			X											
27B. 2,4-Dinitrotoluene (121-14-2)			X											
28B. 2,6-Dinitrotoluene (606-20-2)			X											
29B. Di-N-Octyl Phthalate (117-84-0)			X											
30B. 1,2-Diphenylhydrazine (as Azo-benzene) (122-66-7)			X											
31B. Fluoranthene (206-44-0)			X											
32B. Fluorene (86-73-7)			X											
33B. Hexachlorobenzene (118-74-1)			X											
34B. Hexachlorobutadiene (87-68-3)			X											
35B. Hexachlorocyclopentadiene (77-47-4)			X											
36B. Hexachloroethane (67-72-1)			X											
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X											
38B. Isophorone (78-59-1)			X											
39B. Naphthalene (91-20-3)			X											
40B. Nitrobenzene (98-95-3)			X											
41B. N-Nitrosodimethylamine (62-75-9)			X											
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X											

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)		2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION		b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION		c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	d. NO. OF ANALYSES	a. CONCENTRATION	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS		b. NO. OF ANALYSES
			(1)	(2) MASS	(1)	(2) MASS				(1)	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)												
43B. N-Nitro-sodiphenylamine (86-30-6)			X									
44B. Phenanthrene (85-01-8)			X									
45B. Pyrene (129-00-0)			X									
46B. 1,2,4-Trichlorobenzene (120-82-1)			X									
GC/MS FRACTION - PESTICIDES												
1P. Aldrin (309-00-2)			X									
2P. α-BHC (319-84-6)			X									
3P. β-BHC (319-85-7)			X									
4P. γ-BHC (58-89-9)			X									
5P. δ-BHC (319-86-8)			X									
6P. Chlordane (57-74-9)			X									
7P. 4,4'-DDT (50-29-3)			X									
8P. 4,4'-DDE (72-55-9)			X									
9P. 4,4'-DDD (72-54-8)			X									
10P. Dieldrin (60-57-1)			X									
11P. α-Endosulfan (115-29-7)			X									
12P. β-Endosulfan (115-29-7)			X									
13P. Endosulfan Sulfate (103-107-8)			X									
14P. Endrin (72-20-6)			X									
15P. Endrin Aldehyde (7421-93-4)			X									
16P. Heptachlor (76-44-8)			X									

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
VA0084298	002

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			b. NO. OF ANALYSES	
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION		(2) MASS
GC/MS FRACTION - PESTICIDES (continued)														
17P. Heptachlor Epoxide (1024-57-3)			X											
18P. PCB-1242 (53469-21-9)			X											
19P. PCB-1254 (11097-69-1)			X											
20P. PCB-1221 (11104-28-2)			X											
21P. PCB-1232 (11141-16-5)			X											
22P. PCB-1248 (12672-29-6)			X											
23P. PCB-1260 (11096-82-5)			X											
24P. PCB-1016 (12674-11-2)			X											
25P. Toxaphene (8001-35-2)			X											

EPA Form 3510-2C (8-90)

PAGE V-9

#### PART IV B - ADDITIONAL PROJECTS

Smith Midland is requesting the inclusion of a special condition in the permit to allow the industrial wastewater (002) to be reused or recycled whenever feasible onsite. It is requested that the 002 wastewater be allowed to be utilized onsite for dust suppression or spraying stockpiles. Both activities are to be carried out as a best management practices. There shall be no direct discharge to surface waters from the dust suppression or as a result of spraying stockpiles.

Smith Midland currently utilizes dust suppression; a water truck for dust suppression is available. It is proposed that the 002 wastewater be allowed to be a source of water for the dust suppression operation. The facility also would like to have the ability to utilize the 002 wastewater as a source for spraying stockpiles. Stockpile spraying is currently employed and it is requested the 002 wastewater be allowed as an alternative water source. As noted, these activities are currently active as BMPs and it is requested that reuse/recycling of the 002 wastewater be allowed for these activities.

**VPDES Permit Application Addendum – VA0084298 Discharge Outfall 001**

1. **Entity to whom the permit is to be issued:** Smith Midland Corporation

*Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.*

2. **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3. **Provide the tax map parcel number for the land where the discharge is located.** 7900-75-7124

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** None Anticipated

5. **What is the design average effluent flow of this facility?** 0.0015 MGD

**For industrial facilities, provide the max. 30-day average production level, include units:**

**In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** Yes ☐ No ☒

If "Yes", please identify the other flow tiers (in MGD) or production levels:

*Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?*

6. **Nature of operations generating wastewater:**

Outfall 001 – Domestic wastewater facility serving employee bathrooms

100 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 0

0 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

Plant is dosed throughout work days based on EQ level /received flow. ADF = 0.0012 MGD

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

☒ Permanent stream, never dry

☐ Intermittent stream, usually flowing, sometimes dry

☐ Ephemeral stream, wet-weather flow, often dry

☐ Effluent-dependent stream, usually or always dry without effluent flow

☐ Lake or pond at or below the discharge point

☐ Other: \_\_\_\_\_

9. **Approval Date(s):**

O & M Manual 2008

Sludge/Solids Management Plan

w/ Prior Permit – 2010  
Update attached

Have there been any changes in your operations or procedures since the above approval dates? Yes ☒ No ☐

Contract operator has changed to Environmental Systems Service, LTD.

**VPDES Permit Application Addendum – VA0084298 Discharge Outfall 002**

1. **Entity to whom the permit is to be issued:** Smith Midland Corporation

*Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.*

2. **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3. **Provide the tax map parcel number for the land where the discharge is located.** 7900-75-7124

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** None Anticipated

5. **What is the design average effluent flow of this facility?** 0.004 MGD

**For industrial facilities, provide the max. 30-day average production level, include units:**

The wastewater is generated from finishing operations – the production rate depends on demand for products

**In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels?** Yes ☐ No ☒

If “Yes”, please identify the other flow tiers (in MGD) or production levels:

*Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?*

6. **Nature of operations generating wastewater:**

Outfall 002- Finishing pad operation. Operation is batched.

0 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: 0

100 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☐ Continuous ☒ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

Finishing is based on product demand. Discharge is batch operation. Annual average +/- 8 days/month

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

☒ Permanent stream, never dry

☐ Intermittent stream, usually flowing, sometimes dry

☐ Ephemeral stream, wet-weather flow, often dry

☐ Effluent-dependent stream, usually or always dry without effluent flow

☐ Lake or pond at or below the discharge point

☐ Other: \_\_\_\_\_

9. **Approval Date(s):**

O & M Manual 2008

Sludge/Solids Management Plan w/ Prior Permit - 2010

Have there been any changes in your operations or procedures since the above approval dates? Yes ☒ No ☐

IW discharge is batched at 0.004 mgd; pH adjust & check prior to discharge. Discharge days (~89 DD/Yr) based on product type/demand. ESS performs laboratory monitoring



# VPDES Sewage Sludge Permit Application for Permit Reissuance

## Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.

Part 1 is general information to be provided by all facilities.

Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.

Part 3 must be completed by all facilities that land apply Class B biosolids.

## Part 1 – Sludge Disposal Management (To be completed by all facilities)

Facility Name: Smith Midland Corporation

VPDES Permit No: VA0084298

### 1. Shipment Off Site for Treatment or Blending

Is sewage sludge from your facility sent to another facility that provides treatment or blending?

☒ Yes ☐ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☒ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Receiving Facility Name

Remington WWTP

b. Receiving Facility VPDES Permit No.

VA0076805

c. Include an acceptance letter from the Receiving Facility.

d. Receiving Facility's ultimate disposal method for sewage sludge Land application

### 2. Disposal in a Municipal Solid Waste Landfill

Is sewage sludge from your facility placed in a municipal solid waste landfill?

☐ Yes ☒ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name

b. Landfill Permit No.

c. Include an acceptance letter from the landfill.

### 3. Incineration

Is sewage sludge from your facility fired in a sewage sludge incinerator?

☐ Yes ☒ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?

☐ Yes ☐ No

If yes, provide the Air Registration No. \_\_\_\_\_

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name

c. Air Registration No.

d. Include an acceptance letter from the Incinerator.

### 4. Class A Biosolids

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2.

☐ Yes ☒ No

Are Class A biosolids from your facility land applied in bulk?

☐ Yes ☐ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the

☐ Yes ☐ No

VDACS certification number? \_\_\_\_\_

### 5. Class B Biosolids

Do you produce Class B biosolids? If yes, complete Part 2.

☐ Yes ☒ No

Are Class B biosolids from your facility land applied under the authorization of this VPDES Permit? If yes, complete Part 3.

☐ Yes ☐ No

### 6. Land Application Under a Separate Permit

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit?

☐ Yes ☒ No

Biosolids are land applied under the authorization of a ☐ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name

b. Permit No.

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F.

## VPDES Sewage Sludge Permit Application for Permit Reissuance

### Part 2 – Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.) NA

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☐ Yes ☐ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9VAC25-31-710 A 3 through A 8 or Class B pathogen requirements in 9VAC25-31-710 B 1 through B 4? ☐ Yes ☐ No  
Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. \_\_\_\_\_
3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10? ☐ Yes ☐ No  
Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. \_\_\_\_\_
4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540 B? ☐ Yes ☐ No
5. Has data from the most recent 3 samples for pH (S.U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as CaCO<sub>3</sub> (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart. ☐ Yes ☐ No  
If no, provide the data with this application. \_\_\_\_\_

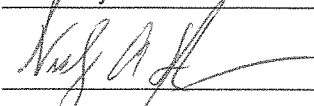
### Part 3 – Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.) NA

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100 P 9.
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form – Attachment to Section C).
3. Are any new land application fields proposed at this reissuance? ☐ Yes ☐ No  
If yes, contact the DEQ Regional Office for additional submittal requirements.
4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate. ☐ Yes ☐ No  
If no, contact the DEQ Regional Office for additional submittal requirements.
5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information? ☐ Yes ☐ No
  - a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
  - b. A description of the transport vehicles to be used.
  - c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
  - d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
  - e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
  - f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

### Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title Wes Taylor

Signature 

Telephone number / Email (540) 439 3266 /

Date signed 10/27/15

(Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

**CULPEPER ENGINEERING, P.C.  
3251 GERMANNA HIGHWAY  
LOCUST GROVE, VIRGINIA 22508  
PHONE: 540 423-9706**

October 16, 2015

Cheryl St Amant  
Fauquier County Water and Sanitation Authority  
Via Email: [camant@fcwsa.org](mailto:camant@fcwsa.org)

Re: Smith Midland Corporation  
5119 Catlett Road, Midland, VA

Dear Ms. St.Amant,

Smith Midland Corporation, located in Fauquier County, has a domestic wastewater plant which serves employee bathrooms. The facility, VPDES Permit VA0084298, has a rated capacity of 1,500 gpd (0.0015 MGD). The domestic wastewater treatment plant includes septic tanks and Multi-Flo aerobic treatment units (ATU). As part of the routine maintenance of the treatment units, septage is removed from the septic tanks and waste solids (managed as septage) are removed from the ATUs. It is estimated +/- 4,000 gallons of waste (mixed liquor) may need to be removed from the ATUs annually and the septic tanks should be pumped out at least once/three years.

On behalf of the facility, I am requesting verification that these domestic wastewater residuals may be transferred to the Remington WWTP septage receiving facility by a licensed hauler. The haulers that may be used for transfer are Butler and Eicher or A & M Septic Service.

If there are any questions, please do not hesitate to contact me.

Sincerely,



Rebecca S. Tolliver, P.E.  
[culpeng@gemlink.com](mailto:culpeng@gemlink.com)

cc: Wes Taylor, Smith Midland

**Becky**

---

**From:** Cheryl St. Amant [camant@fcwsa.org]  
**Sent:** Friday, October 16, 2015 11:44 AM  
**To:** Becky  
**Cc:** 'Wes Taylor'; Raymond Searls; Remington wwtp  
**Subject:** FW: Smith Midland Domestic Wastewater Residuals  
**Attachments:** FCWSA Request for management of Smith Midland wastewater residuals.pdf

Ms. Tolliver,

Yes, FCWSA – Remington WWTP will accept the domestic waste described in the attached letter. Please let me know if you have any questions. Raymond Searls is the Chief Operator of the Remington WWTP.

Cheryl St. Amant  
Associate General Manager Operations  
Fauquier County Water & Sanitation Authority  
540-349-2092  
Cell: 703-587-3788

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**From:** Becky [mailto:culpeng@gemlink.com]  
**Sent:** Friday, October 16, 2015 11:38 AM  
**To:** Cheryl St. Amant  
**Cc:** 'Wes Taylor'  
**Subject:** Smith Midland Domestic Wastewater Residuals

Ms. St. Amant,

Attached is a request for the management of wastewater residuals from the Smith Midland domestic wastewater plant. As noted in the attached, the treatment plant treats wastewater from employee bathrooms. If you have any questions, please do not hesitate to contact me.

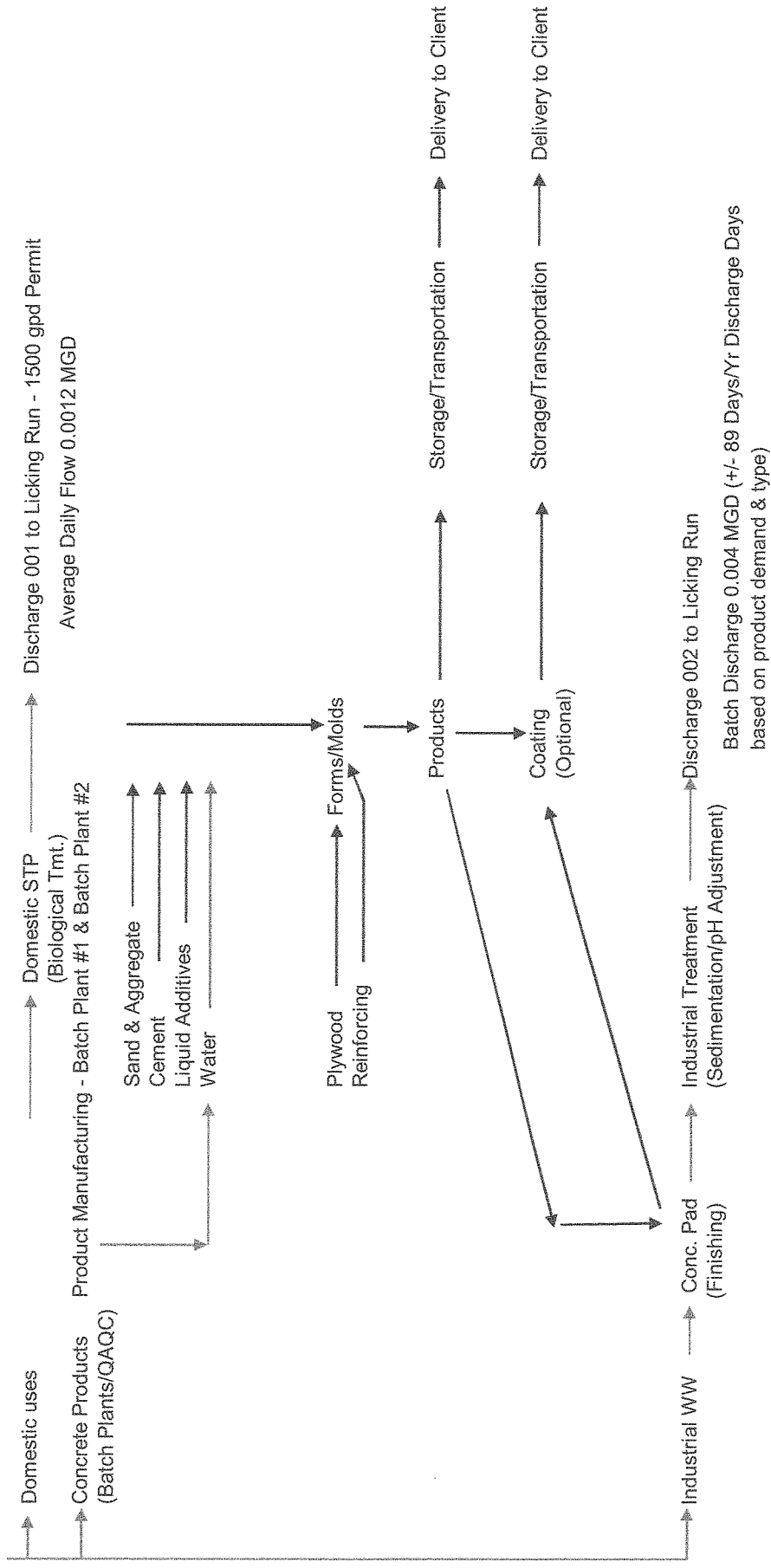
Thank you,

Becky Tolliver

Phone: 540 423 9706  
[culpeng@gemlink.com](mailto:culpeng@gemlink.com)

**SMITH MIDLAND CORPORATION  
LINE DIAGRAM OF WATER USE**

Smith Midland - Well Production (Onsite source well)

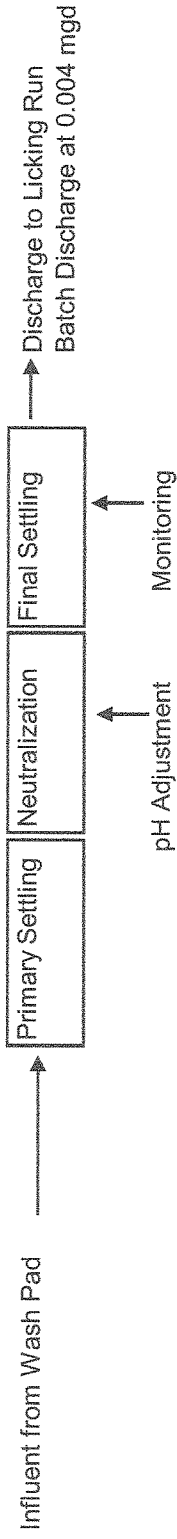


## Outfall 002 Treatment/Flow Diagram - Industrial Waste Treatment Product Finishing on Pad

Sand Blasting - Surface etching to enhance appearance - Does not generate wastewater  
 Water Wash - Removal of non-hardened superficial layer of cement to expose aggregate by high pressure water wash  
 Acid Wash - Using high pressure hot water wash and muriatic acid the surface is etched to create texture & aesthetic appeal

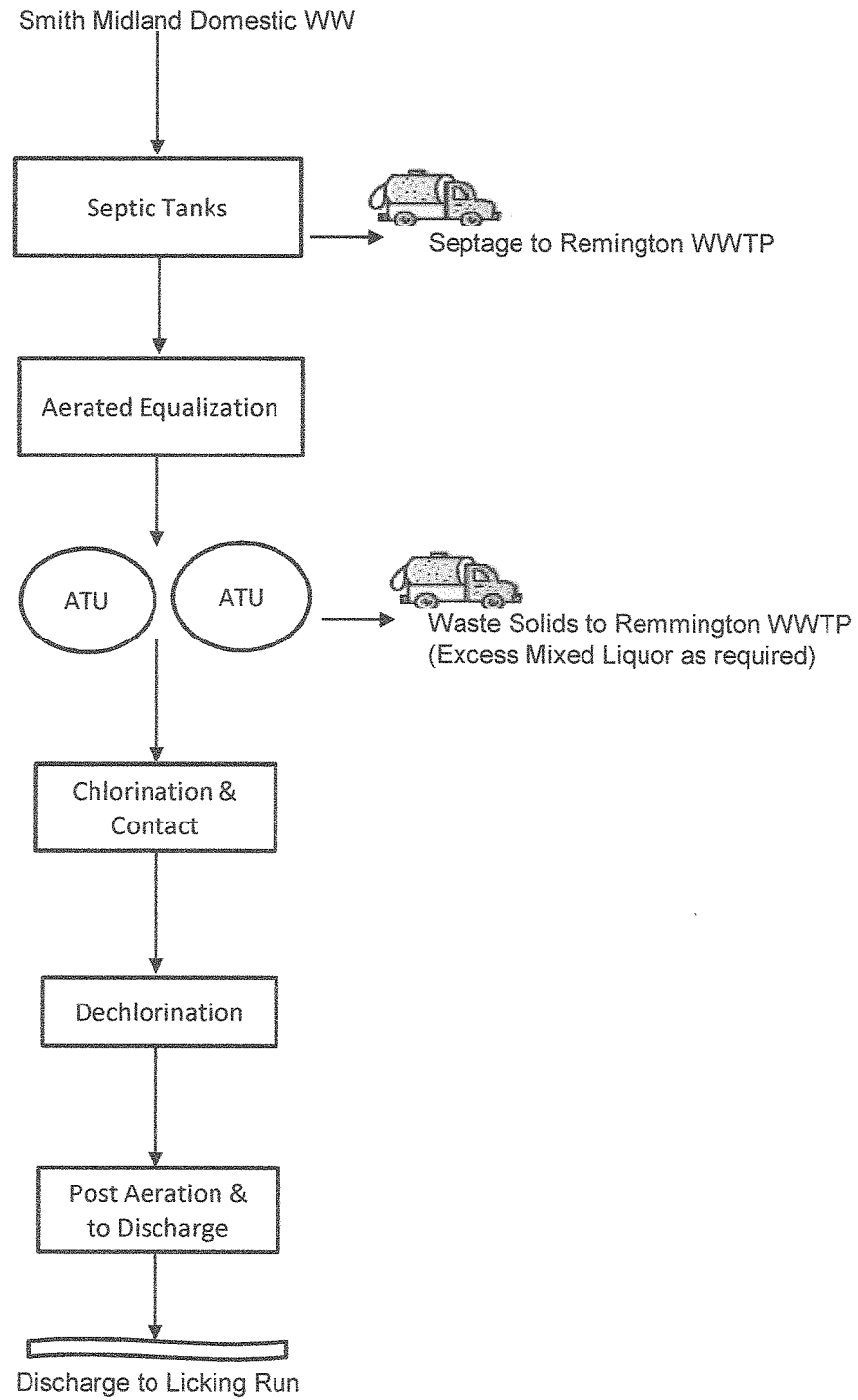


### Treatment (Settling & Neutralization)



The water wash & acid wash are performed based on product/finish demand. Discharge is by batch (0.004 MGD/Batch on Discharge Days). All finishing operations are a function of product "demand". The volumes/schedule may change based on sales. Prior 12 months indicate the average days per month with a discharge (0.004 NGD) were 8. The max Days/M was 12 and the minimum days per month was 0. There were 89 discharge days during the 12 months evaluated (Sept, 2014 - Aug, 2015).

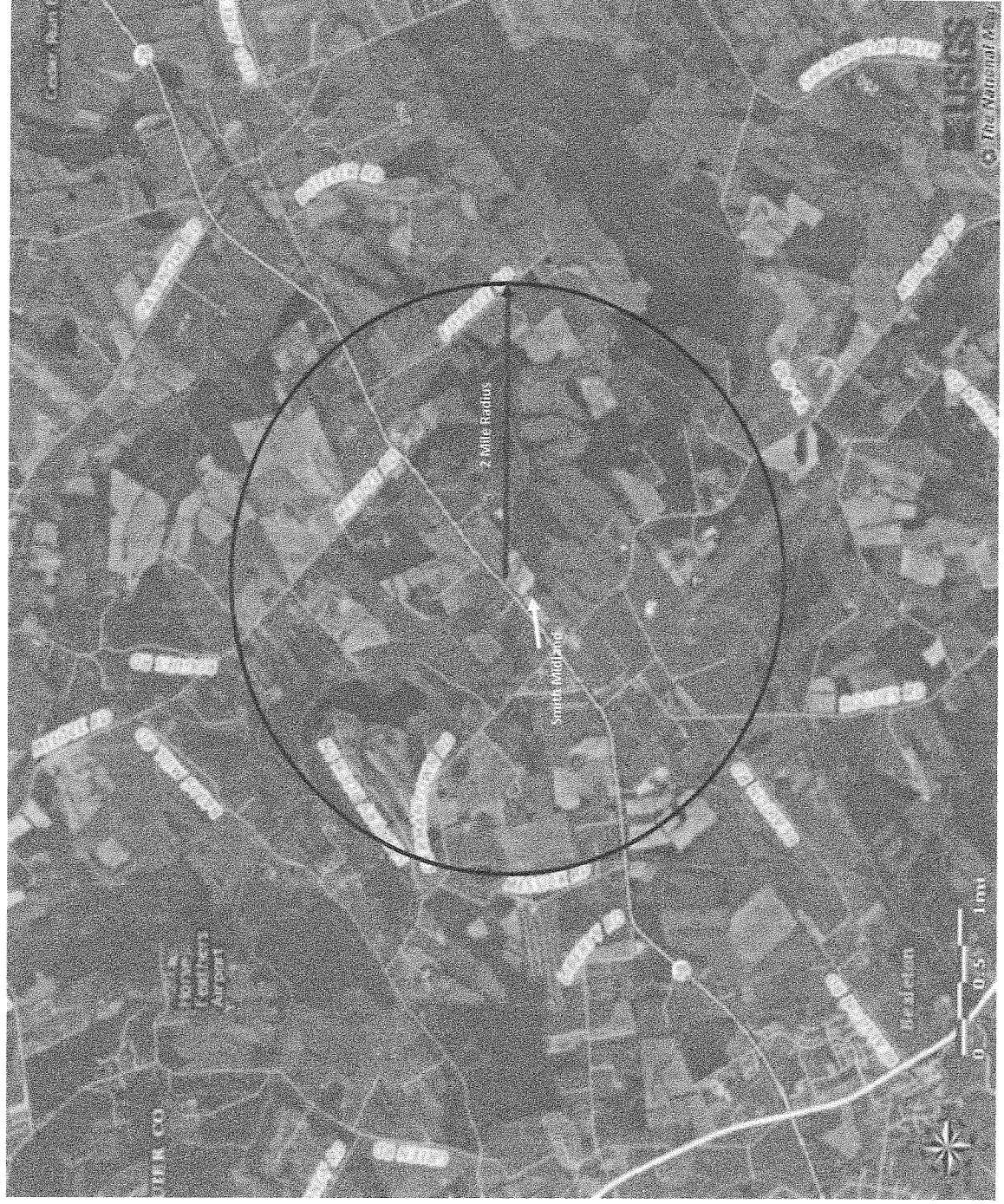
Line Drawing Smith Midland Domestic Plant



Average Daily Flow 0.0012 MGD

## Smith Midland 2 Mile Radius

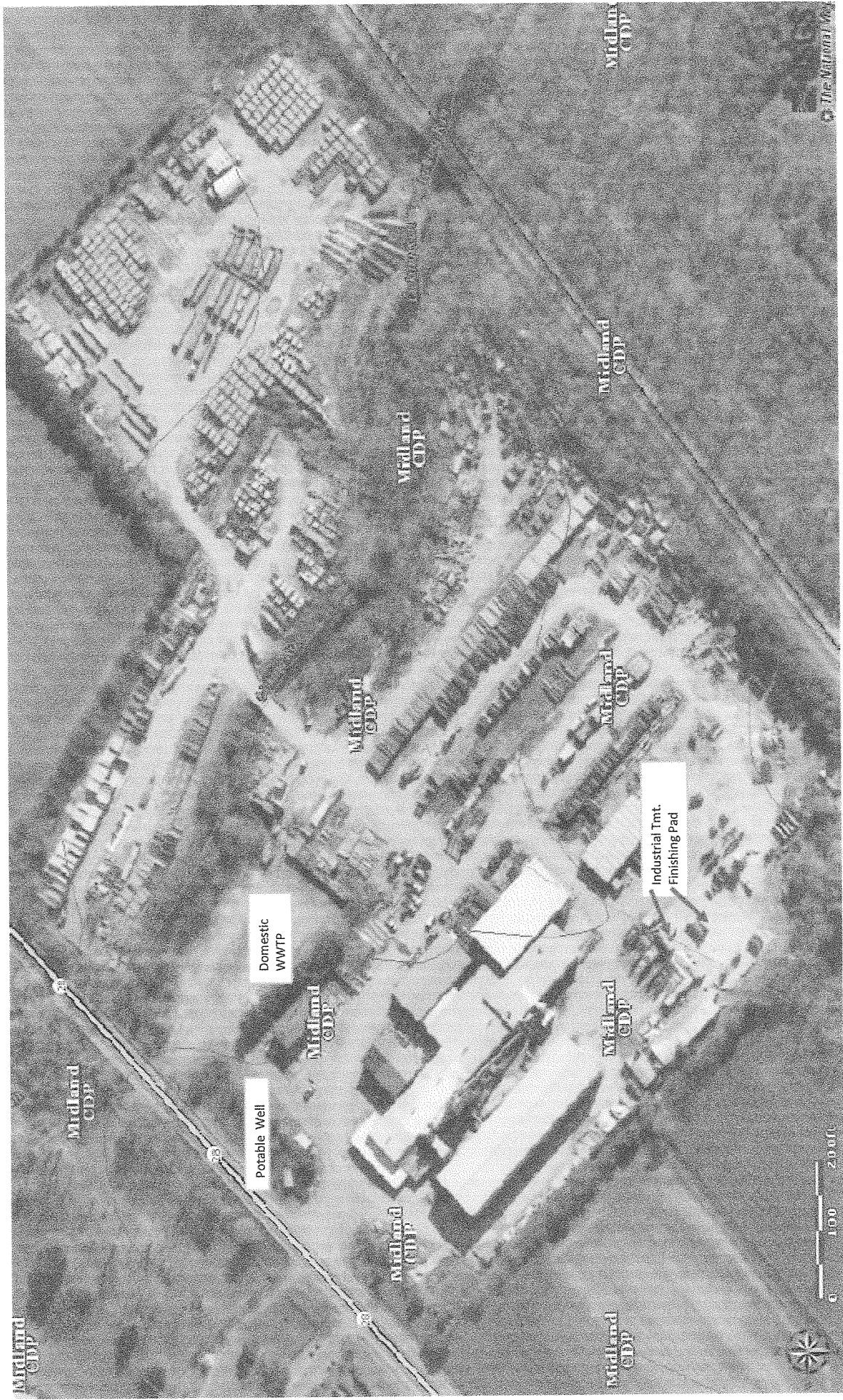
NOTES: Data available from U.S. Geological Survey, National Geospatial Program.





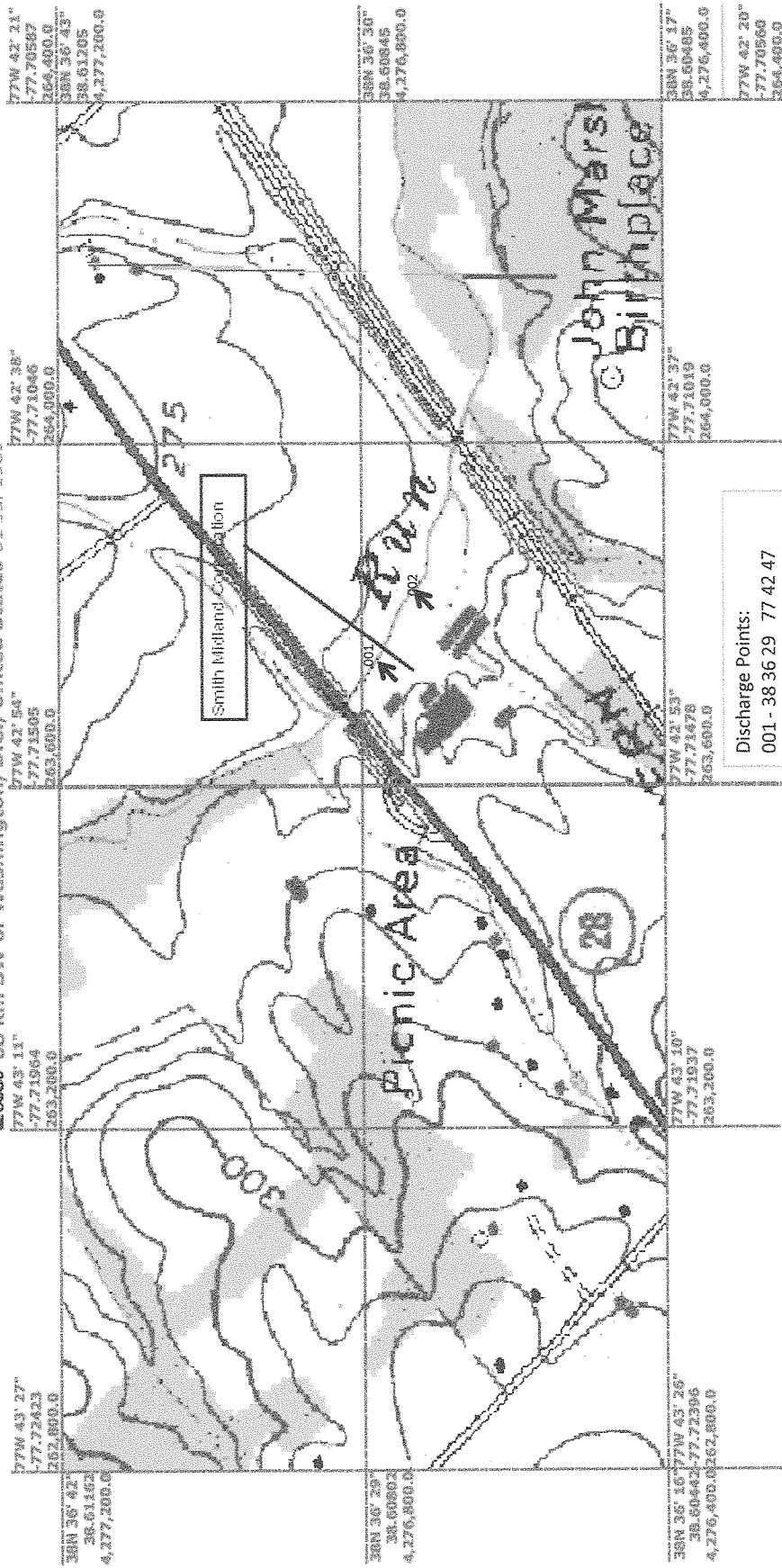
# Smith Midland Aerial

NOTES: Data available from U.S. Geological Survey, National Geospatial Program.



Open in The National Map Viewer

USGS 68 km SW of Washington, D.C., United States 01 Jul 1989



Discharge Points:

001 - 38 36 29 77 42 47

002 - 38 36 27.4 77 42 44.7

Image courtesy of the U.S. Geological Survey



# VADEQ VEGIS Map Export

## Legend

DEQ Offices (2009)

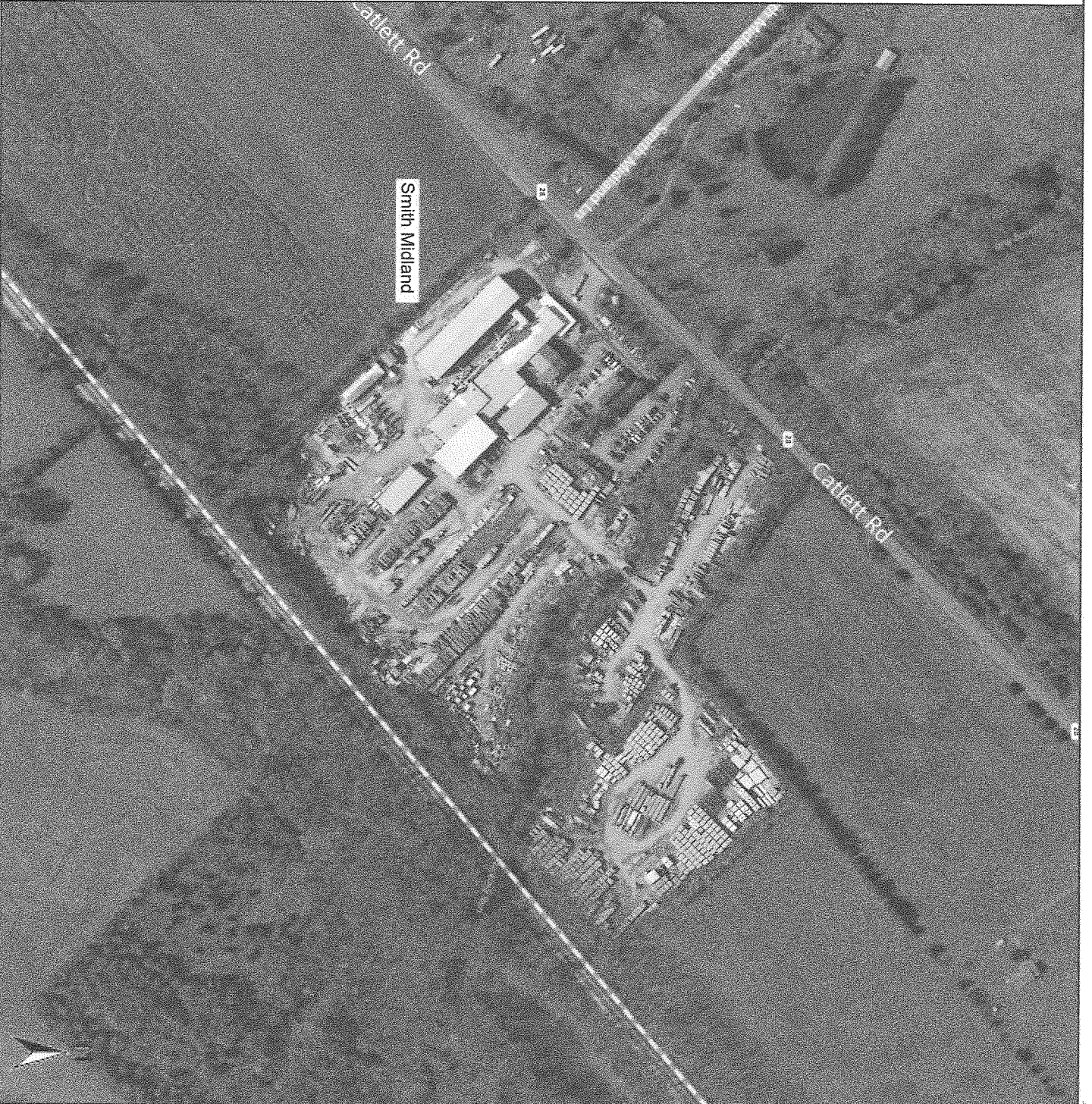
- DEQ Central Office
- 1 South West Regional Office
- 2 Blue Ridge Regional Office
- 3 Northern Regional Office
- 4 Piedmont Regional Office
- 5 Tidewater Regional Office
- 6 Valley Regional Office
- DEQ Regions (2009)

Feet

0 100 200 300 400

1:4,514 / 1"=376 Feet

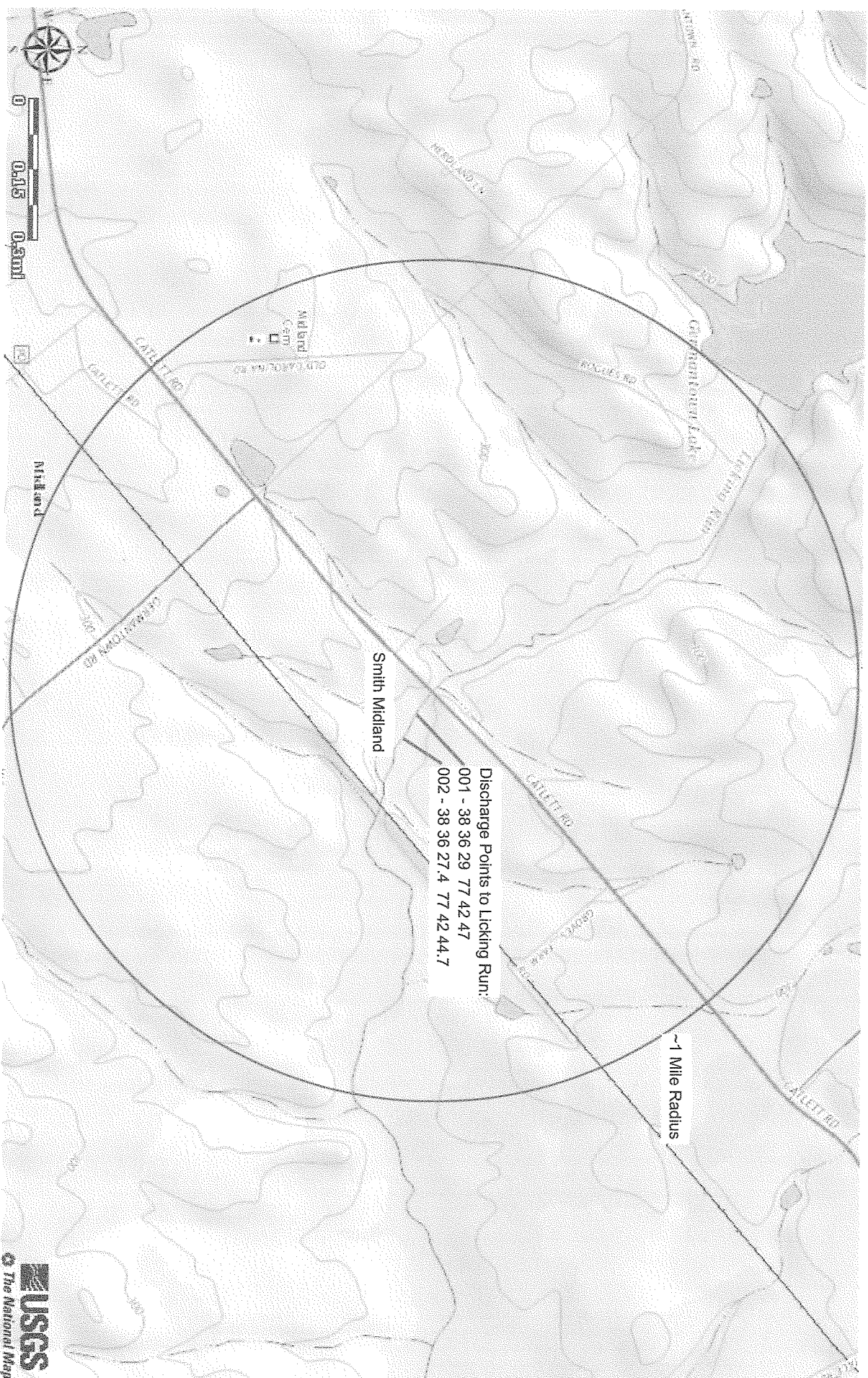
DISCLAIMER: Information contained on this map is to be used for reference purposes only. The VA Dept. of Environmental Quality makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.



Title: Smith Midland

Date: 10/22/2015

# Smith Midland Topographic Map



# PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in Fauquier Times - Democrat in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Smith Midland Corporation

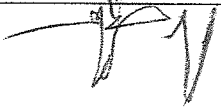
Owner: ATTN: Wes Taylor, Vice President

Agent/Department Address: P.O. Box 300

Midland, Virginia 22728

Agent's Telephone No.: 540 439 3266

Printed Name: Wes Taylor

Authorizing Agent - Signature: 

Date: 12/29/15

VPDES Permit No. VA0084298  
Facility Name: Smith Midland Corporation